

# Presenting with Power: Effectively and Dynamically Communicating Your Research

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# 80% of Your Presentation Will Be Forgotten

- People tend to remember
  - Tone
  - Pace
  - Nonverbal expressions
- People tend to easily remember three things
  - “Stop, look, and listen”
  - “Blood, sweat, and tears”
  - “Friends, Romans, Countrymen”

# Today's Objectives: The Rule of Three in Action

- Presentation Content
- Slide and Speaker Aesthetics
- Performance Do's and Don'ts

# Planning Your Presentation: The Rule of Three

- What three key points do you want your audience to remember?
- Structure your talk around the three points and find ways to illustrate them.
- Have a clear beginning, middle, and end to your talk.

# What? Why? How?

- The purpose of a research presentation is to summarize
  - **WHAT** you have been working on
  - **WHY** it is important
  - **HOW** you conducted your research

# Customize Content for the Audience

- Who will be in the audience?
- What are their expectations?
- Are you presenting new material or building upon prior knowledge?
- How many attendees?
- Will the talk be interactive?
- How much time is allotted for the talk?

# Content Guidelines for a Research Presentation

- Title slide (Highly descriptive title)
- Acknowledgements
- Research Question or Objectives/Goals
- Background
- Methodology (or Technical Approach)
- Results
- Discussion of Results
- Conclusions
- Future Work
- Questions slide

# PowerPoint Do's

- Include a descriptive title/heading line on every slide.
- Keep slides simple and uncluttered by using short phrases, not long sentences.
- Use consistent capitalization and punctuation on all slides.
- Use consistent verb tense on all bullet items.
- Number your slides.

# Choosing a Font


## Easy

san serif 

block **t**

bold **a**

## Difficult

serif 

italics *t*

plain a

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## Examples:

helvetica  
arial

sit  
sit



## Examples:

times  
New York



sit  
sit

# Effective Font Size



Too small!

This is Helvetica 12 point (normal text)

This is Helvetica 18 point

This is Helvetica 24 point

This is Helvetica 36 point

This is Helvetica 48 point

# To Upper Case or to Lower Case, That is the Question

A MIXTURE OF UPPER AND LOWER CASE LETTERS IS EASIER TO READ QUICKLY AND ACCURATELY, AND TAKES UP LESS SPACE ON THE SLIDE.



A mixture of upper and lower case letters is easier to read quickly and accurately, and takes up less space on the slide.

# When to Show & When to Tell

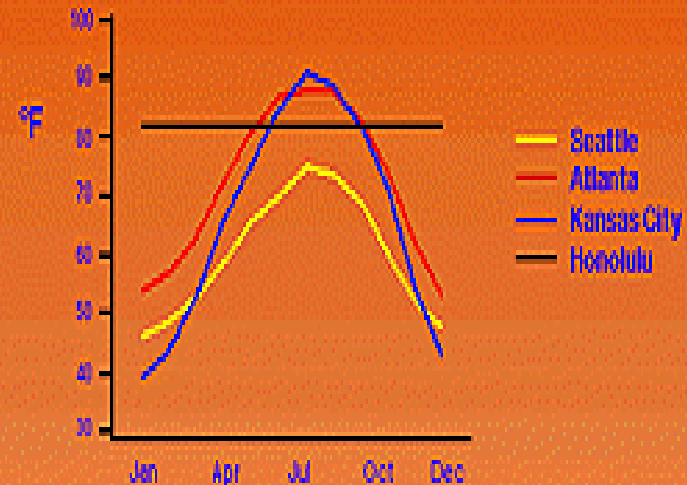
- Make use of visuals wherever you can!
- People like to **see** what you're doing:
  - Diagrams
  - Photos
  - Flow charts
  - Tables
- Use text when you present concepts that you can't show or when words help to describe the visual.

# How to Show Effectively

Average monthly high and low temperatures in four U.S. cities

	Seattle	Atlanta	KansasCity	Honolulu
January	46/67	54/36	39/22	82/73
February	49/68	57/37	44/26	82/73
March	53/40	63/41	53/33	82/73
April	59/44	72/50	66/45	82/73
May	66/49	81/59	75/55	82/73
June	70/53	87/66	85/66	82/73
July	75/56	88/69	91/71	82/73
August	74/56	88/68	89/68	82/73
September	69/53	83/63	82/60	82/73
October	60/48	74/52	71/49	82/73
November	52/42	62/40	54/35	82/73
December	48/39	53/35	43/27	82/73

Average monthly high temperatures in four U.S. cities



Average high temperatures for winter months in four U.S. cities

	Seattle	Atlanta	KansasCity	Honolulu
November	48	62	54	82
December	52	53	43	82
January	46	54	39	82
February	49	57	44	82

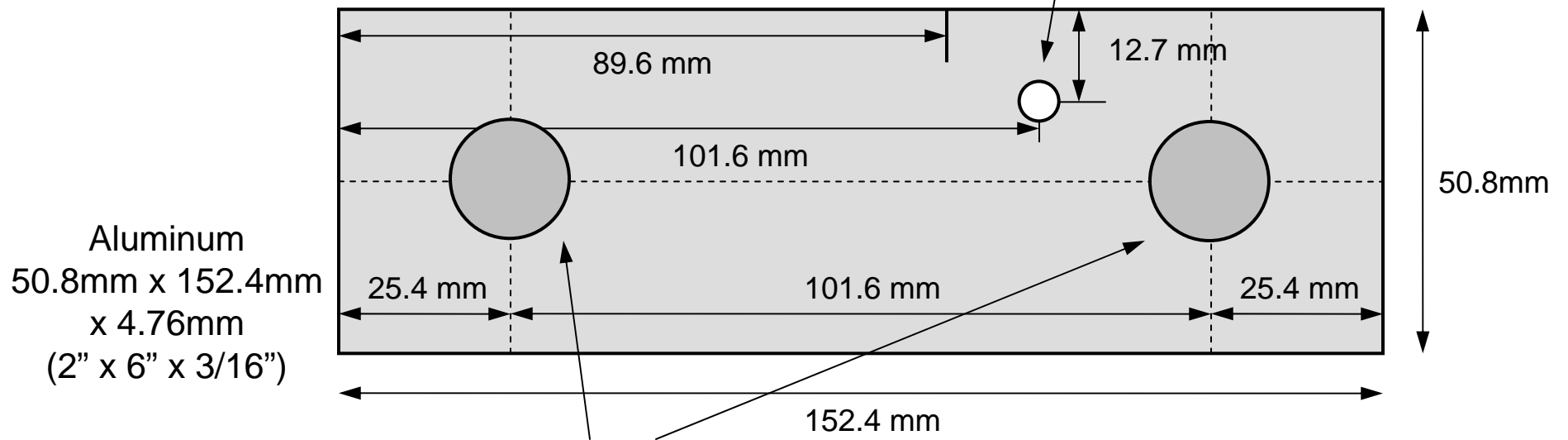
# What Works

Specimen #1

6.35mm/0.25" long edge notch  
introduced in 10 length increments  
(notch width of 0.025mm/0.01")

Specimen #2

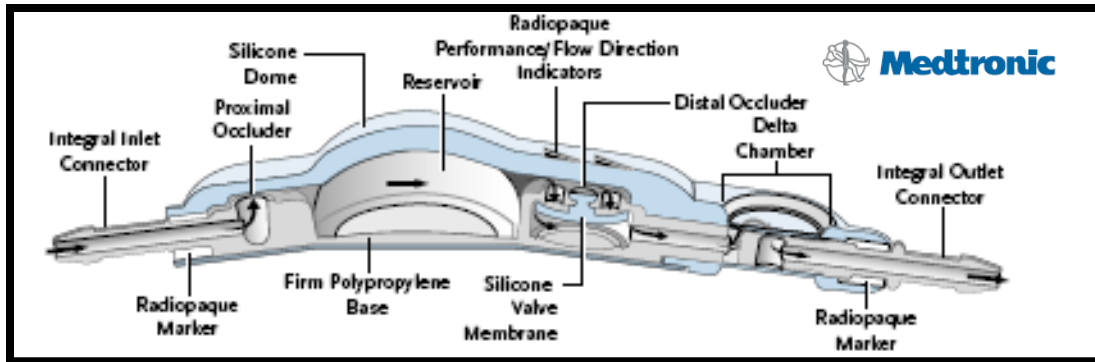
6.35mm/0.25" diameter hole  
drilled in 11 increments



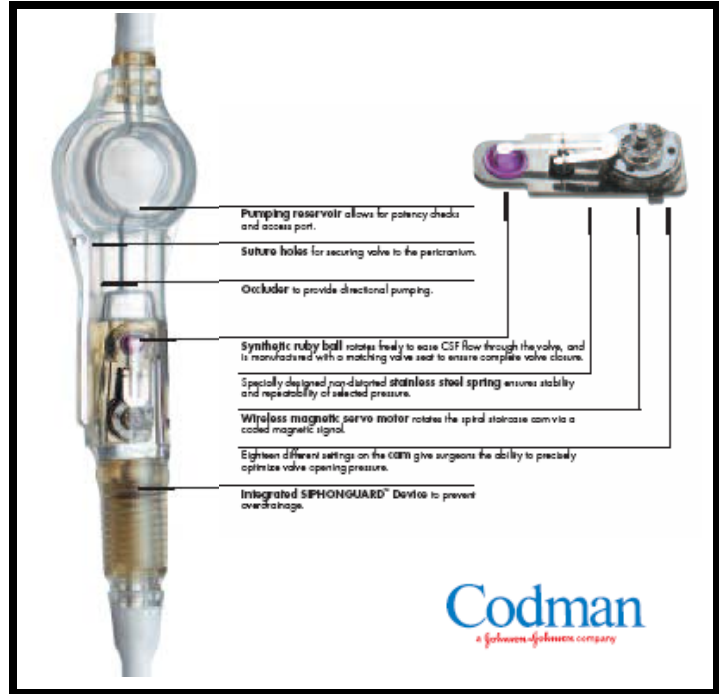
2.25 MHz, 12.7mm  
diameter piezoelectric  
discs bonded to top  
surface



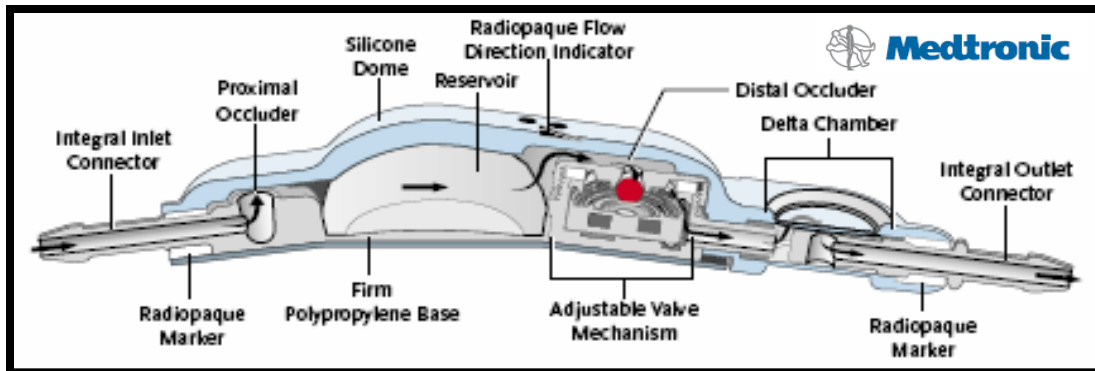
# What Doesn't Work



Medtronic Delta Valve

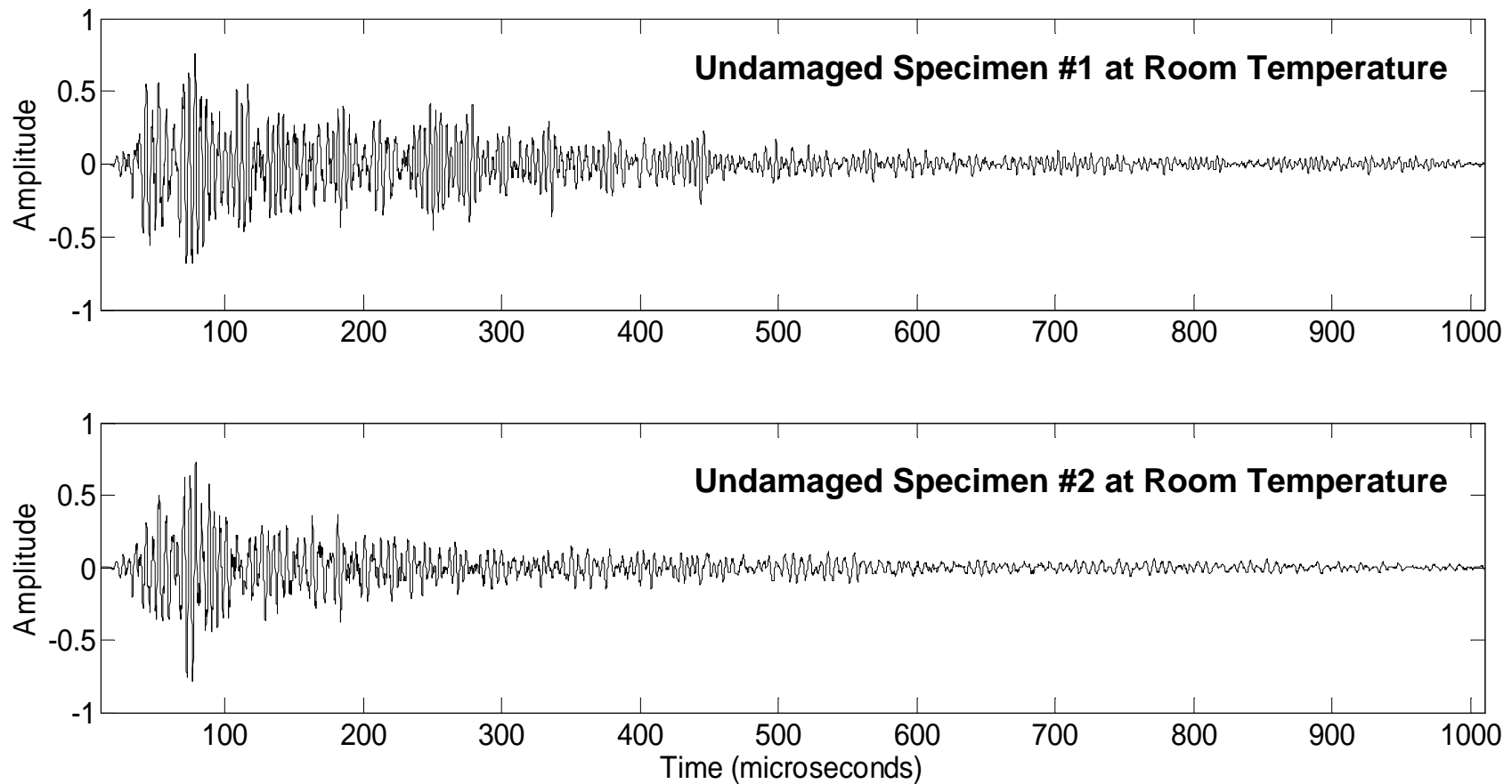


Codman Hakim Programmable Valve



Medtronic Strata Valve

# Ultrasonic Signals from Nominally Identical Samples



# Choosing the Right Contrast and Colors

- White background with dark text is the norm at professional conferences.
- Dark backgrounds with light text project well.
- Red, orange, or blue lettering become unreadable when projected on dark background.
- Avoid “busy” slide designs, those with distracting borders or graphics; keep it simple and “clean.”

# Presenting With Style: Looking as Good as Your Slides

- Think conservative.
- Clean, pressed shirts and slacks/skirt.
- Men—white t-shirt under button down or polo shirts.
- Shoes and belt should be same color.
- Women—knee length skirts, moderate heel, minimize accessories.
- Nothing tight or trendy.

# Performance Techniques: Bringing Your “A” Game

- Take several deep breaths.
- Stand up straight—pay attention to your posture.
- Make eye contact with your audience.
- Project your voice.
- Pace the rate of your speech so that it is natural and moderate.
- Monitor your gestures and avoid habitual behaviors (hands in pocket, playing with your hair, pacing).

# Presentation Never's

- **Never** run over your time limit. Ever!
- **Never** apologize for any aspect of your presentation. If you have to apologize, you aren't prepared.
- **Never** respond aggressively to a question or comment. Even if you are right, the whole audience will resent you for picking on that poor questioner.

# Top 5 Secrets of the Pros

5. Tour the space you'll be presenting in prior to your talk.
4. Make sure the room's technology is compatible with yours.
3. Stand to one side of the projection screen instead of behind the podium.
2. Use the "meteorologist chop" instead of a laser pointer or a cursor.

And the #1 Secret...

**Practice!**

**A lot!**

# Questions?